

Announcement for Proposals, 2004-1

Joint Fire Science Program

U.S. Department of the Interior

**Bureau of Indian Affairs
Bureau of Land Management
National Park Service
U.S. Fish and Wildlife Service
U.S. Geological Survey**

U.S. Department of Agriculture

Forest Service

Opens October 15, 2003

Closes December 15, 2003

NOTE TO POTENTIAL PROPOSERS: There are significant changes in requirements for proposals. Please read the AFP carefully.

This Announcement for Proposals includes two Task Statements: “rapid response” projects for future wildland fires, and rapid response projects for past (2003) fires. Both Task Statements focus on the effectiveness of pre-fire fuel treatments.

Announcement for Proposals

by the
Joint Fire Science Program

(Note: The Joint Fire Science Program previously posted Requests for Proposals (RFPs). These are now called Announcements for Proposals (AFPs).

A. Program Description

The Joint Fire Science Program (JFSP) is a partnership of six federal wildland management and research agencies with a need to address problems associated with managing accumulating wildland fuels (combustible material, generally living and dead plant materials), fire regimes, and fire-impacted ecosystems on lands administered by the partner agencies. The partner agencies include the USDA Forest Service and five bureaus in the Department of the Interior (Bureau of Indian Affairs, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and the U.S. Geological Survey). For the purposes of this Announcement for Proposals (AFP), "wildlands" are considered to be forests, woodlands, shrublands, grasslands, and associated wetlands and riparian areas.

Wildland fuels have been accumulating during at least the past half-century due to wildland fire management policies, wildland management practices, and other factors. As demonstrated in the wildland fires of 2002, the additional fuels contribute to intense fire behavior and increase the resistance of fires to control. Consequently, property and natural resources have been destroyed, costs of fire management have escalated, fire dependent ecosystems have deteriorated, and the risks to human life continue to escalate.

The Congress, agency administrators, JFSP partners, and others have recognized that the accumulation of wildland fuels must be reduced in order to reduce the human threat from fire and maintain natural resource values. Congress directed the Department of the Interior and the USDA Forest Service to develop a Joint Fire Science Plan to provide science-based support to land management agencies as they address this need. The JFSP was established with the 1998 Appropriation for Interior and Related Agencies to help ensure that cooperating Federal land management agencies expedite scientifically sound, efficient, systematic, and effective solutions and monitoring programs that cross agency jurisdictions and fuel types.

The 1998 Joint Fire Science Plan addressed four issues (Principal Purposes) critical to the success of the fuels management and fire use programs. These included wildland fuels inventory and mapping, evaluation of fuels treatments, scheduling of fuels treatments, and monitoring and evaluation. The Congress included additional direction in the 2001 Appropriation for Interior and Related Agencies. In addition to the four original Principal Purposes, the JFSP was directed to focus attention on such issues as protocols for evaluating post fire stabilization and rehabilitation projects, aircraft based remote sensing, and regional/local issues.

For further background on the goals of the JFSP, those considering submitting proposals and other interested parties are encouraged to review the Joint Fire Science Plan which is available via the Internet at: <http://jfsp.nifc.gov>. In addition, the JFSP issued AFPs in June 1998, February 1999, February 2000, February 2001, and October 2003 and subsequently selected and funded more than

220 projects. Previous AFPs and lists of funded projects can also be found on the web site.

This AFP contains two Task Statements for which proposals are sought. The JFSP encourages proposals from all interested parties. However, because the focus of the JFSP is on wildland fire and fuels issues on Federal wildlands, evidence of direct involvement by Federal scientists or land managers in the development of proposals must be included in all proposals. **Proposals that do not have evidence of direct involvement by federal land managers or scientists not be considered for funding.** Examples of documented involvement by land managers or scientists include participation as a Principal Investigator, cooperator, or collaborator; letters of commitment and support; and written evidence from the manager that the proposal is responding to an urgent fire or fuels problem of the land manager's unit.

All proposals must include the following items to be considered. The JFSP program office must receive the complete proposal package (including all items in this checklist) by close of business (5:00 pm MST) December 15, 2003. There will be no exceptions to this closing date; incomplete proposals will not be considered.

Facsimile or e-mailed proposals will no longer be accepted.

- 1) One original and five copies of complete proposal packet including all material.
- 2) An electronic version on a diskette or compact disk (in Word or WordPerfect format) must be included.
- 3) Signature of a principal investigator (PI), (this person will be the technical contact for the JFSP office), Federal cooperator or land manager (if different than the PI) as appropriate (see definitions of Federal cooperator and land manager), and a concurrence signature of the appropriate Federal Administrative or Contracting Officer.
- 4) Complete address including phone number, mailing address, surface mail address (if different than mail address) and e-mail address of principal investigator, Federal cooperator or land manager as appropriate, and appropriate Federal Administrative or Contracting Officer.
- 5) Letters of support are not required but are considered in the review process. However, all letters of support that are submitted must be included with the hard copy proposal package by the due date. Each letter must clearly state the title of the project and the principal investigator of the proposed work.

Questions and proposals should be directed to:

Dr. Bob Clark
Program Manager
Joint Fire Science Program
National Interagency Fire Center
3833 S. Development Ave.
Boise ID 83705
phone (208) 387-5349
email: Bob_Clark@nifc.blm.gov

Proposed project budgets can be complex, often involving multiple agencies or units in association with non-Federal units. Proposers should ensure that appropriate Federal Administrative Officers, Contracting Officers, or Grants and Agreements Specialists, as well as budget or grants and contract offices of non-federal cooperators, review the proposal prior to submission to ensure that the budget and other fiscal aspects of the proposal meet agency requirements. The appropriate AO/CO/Grants and Agreements Specialist concurrence signature from the lead agency is required as identified in number 3 above.

Finally, the JFSP conducts annual workshops for Principal Investigators (PIs) from each active project. Proposal budgets submitted in response to this AFP should include travel and related funding needed for one PI to participate in the annual workshop.

B. Areas of Interest for Proposals

This AFP contains two Task Statements, and proposals are sought on each of the tasks. In some cases it may be appropriate for proposals to respond to both Task Statements. However, proposals responding to both Task Statements should clearly indicate which Task Statement is the primary Task Statement for proposal evaluation purposes.

In instances where proposed work will require visiting or working on uncontrolled wildland fire incidents, proposers responding to this AFP should note that all wildland management agencies have mandatory training and safety requirements for such work. Investigators will be required to meet the following standards when conducting research on uncontrolled incidents:

- 1) Field technicians collecting data on or directly adjacent to an uncontrolled incident will be required to achieve a fitness score of “Arduous” on the Work Capacity Test (Pack Test), as demonstrated by walking 3 miles in 45 minutes or less carrying a 45 pound backpack. The test is generally available from local fire management offices. Additional information is available on the Internet at http://www.fs.fed.us/fire/fire_new/safety/wct/wct_index.html. Each technician will carry a current “red card,” signed by an agency Fire Management Officer or other fire supervisor, indicating that he or she is qualified as a Firefighter (FFT2) minimum or as a Technical Specialist in the area of expertise. An individual qualified as single resource boss or higher must accompany all field technicians. The arduous fitness rating must be clearly indicated on the card. The arduous fitness rating is required for Field Observer and Fire Effects Monitor (*Wildland and Prescribed Fire Qualification System Guide 310-1*). These are the two National Wildfire Coordinating Group (NWCG) recognized positions that most closely resemble the type of work that a field technician

would be doing. “Technical Specialist” is a generic term for which there are no training and qualification standards in 310-1. Information about qualifications and training courses is generally available from local fire management offices.

- 2) Field supervisors visiting the incident on an occasional basis and not directly involved in data collection will be required to achieve a fitness score of “moderate” on the Work Capacity Test, as demonstrated by walking 2 miles in 30 minutes carrying a 25-pound backpack. Each supervisor will carry a current red card, signed by an agency Fire Management Officer or other fire supervisor, indicating that he or she is qualified as a Technical Specialist in the area of expertise. The moderate fitness rating must be clearly indicated on the card. The Incident Commander or Fire Use Manager must also agree to accept the moderate rating for occasional visits to the uncontrolled incident.
- 3) Personnel who will confine their work to the Incident Base Camp or other areas far removed from the perimeter of the uncontrolled incident are not required to attain a fitness standard. However, a red card indicating Technical Specialist in the area of expertise is still recommended.
- 4) All personnel who will be visiting the uncontrolled incident, even on an occasional basis, must have taken basic wildland firefighter training consisting of S-130 – Firefighter, and S-190 - Introduction to Wildland Fire Behavior. In addition, annual wildland firefighter refresher training is required. As noted above, these courses and the Work Capacity Test are generally available from local fire management offices.
- 5) Field investigators will be required to wear approved wildland fire incident personal protective equipment (PPE) including Aramid shirt and pants, helmet with chinstrap, leather gloves, fire shelter, eye and hearing protection, personal first aid kit, and lace type leather boots with non-slip (Vibram type) soles and minimum 8" top. PPE can often be checked out from cooperating wildland fire offices or purchased from a variety of sources. PPE should be obtained prior to initiating planned work.
- 6) Principal Investigators (PI) must work very closely with Incident Management Teams. This should include meeting with Incident Commanders, Fire Use Managers, and Geographic Area Coordinating Groups prior to the fire season to discuss protocols, exchange information, and share areas of concern. Investigator teams are encouraged to include current or former incident management overhead such as Strike Team Leaders, Division Supervisors, Safety Officers, and Fire Behavior Analysts in their configuration. The affected Incident Commander or Fire Use Manager must approve all fireline visits.
- 7) The field team leader shall attend daily briefings, be knowledgeable of weather and fire behavior predictions and daily strategy and tactics. All air operations will be conducted only with specific approval of the responsible Incident Commanders or Fire Use Managers. Field team leaders shall establish contact and brief incident personnel assigned such as Division Group Supervisors to the area of operations. Field team leaders are responsible for the safety of their teams and shall ensure that they have communications with incident personnel at all times and be knowledgeable of emergency procedures in the incident action plan. All field teams shall abide by the 10 Standard Firefighting Orders, the 18 Situations That Shout Watch Out, the Thirty Mile Hazard Abatement Implementation Plan (as required by agency policy)

<http://www.fs.fed.us/fire/safety/investigations/30mile/index.html>,
<http://www.wildfirelessons.net/> and any other requirements stipulated by the Incident Commander or Fire Use Manager when in close proximity to an uncontrolled wildland fire.

- 8) Acceptance of any funding from JFSP under this AFP implies the PI will ensure that field investigations on active fire incidents are conducted according to these terms.

Task 1: *Proposals are sought to obtain, document, and evaluate critical, time-sensitive information or data during or immediately following future wildland fire incidents. Proposals should focus on effects of previous land management activities (such as prescribed burning and mechanical treatments that removed biomass, or post-fire logging) on fire behavior, fire severity, and/or fire effects. Proposals should address wildland/urban interface areas and issues as appropriate. Response teams must meet the requirements described above.*

Certain types of information or data that are essential to our understanding of wildland fire can only be obtained during or immediately after a fire. For example, estimates of flame length or fire spread are more precise and reliable if measured *in situ* rather than inferred from general documentation, poorly validated models, or indirect methods such as stem char heights. Similarly, certain ecological impacts such as water-borne erosion, sedimentation, and changes in stream chemistry occur within days to weeks after a fire. All of these situations have in common the need for a rapid, well organized, and pre-planned response from the science community. In the past, this type of work has often been hampered by lack of funding and by lack of adequate pre-incident planning.

To meet this need, the Governing Board envisions the development of rapid deployment teams of research scientists and technical specialists that can mobilize quickly to investigate and document various aspects of fire behavior or fire effects on uncontrolled wildland fire incidents. Proposals must clearly describe data needs, research objectives and experimental design, and must identify the types of fire incidents and site conditions required to complete the work. Proposals must identify clear criteria for selection of fire incidents and study sites that reflect the needs of the particular study. The Board believes that deployment and actions by these teams would be greatly enhanced if at least one team member was currently qualified at the Strike Team/Task Force Leader level or higher. The Governing Board may request that successful proposers visit specific incidents that the Board believes have value to the goals and objectives of the projects funded under this Task Statement.

Accepted and funded proposals would, following selection and award, remain in effect for two years from date of approval with an additional year to complete analysis and publication preparation. Preliminary findings must be made available within 90 days after each incident. Partial funding will be made available upon approval of the project to enable planning activities and purchasing necessary equipment and supplies in preparation for initiation of field studies. Principal Investigators of approved projects will need only to obtain verbal concurrence from the JFSP Office to initiate fieldwork following onset of the incident(s). The Governing Board anticipates that these projects can be accomplished cost effectively within three years or less. Approval of proposals will not constitute agreement to fund additional work on the same project. However, projects that clearly fit into the Joint Fire Science Plan or Implementation Plan may be asked to develop longer-range proposals after-the-fact; such projects may be funded competitively or non-competitively, in whole or in part, at the discretion of the Governing Board.

Task 2: *Proposals are sought to collect post-fire data and analyze and describe relationships between pre-fire condition and fire behavior, at local to landscape scales, specific to the effects of previous land management activities (such as mechanical treatments and prescribed burning, or previous post-fire logging) that burned in 2003 wildland fires. Proposals should take advantage of sites where pre-fire data are available on fuel treatments, fuel characteristics, and/or stand structure; such sites are strongly preferred.*

Some of the fires of 2003 may have burned over experimental sites and other areas where extensive pre-fire, fuels-related data are available on fuel treatments or on pre-fire stand structure or fuel characteristics. Proposals for sites where reliable fire behavior observations exist are strongly encouraged. Such sites can provide unique opportunities for post-fire studies to evaluate the effects of pre-fire condition on fire behavior, fire severity, and ecosystem impacts.

Proposals must:

- Document the extent and quality of pre-fire data;
- Describe pre-fire experimental design or sampling design and sampled variables;
- Describe pre-fire experimental treatments or variations in vegetation composition and structure;
- Describe expected response variables;
- Include justification of the need for rapid response and of the unique opportunity presented by the fire and the pre-existing data.

Projects will be funded for a maximum of two years from the award date, including one year of field data collection, data analysis, and completion of reports to the JFSP. A technology transfer plan must clearly describe methods for rapid dissemination of results to the science and management communities.

C. Format for Proposals

Overview of the Proposal Format

The full proposal should specify rationale, objectives, methodologies, and deliverables in sufficient detail to allow an informed reader to assess the proposal's validity in addressing one of the Task Statements in the AFP. The proposal should also identify criteria by which success of the project can be determined. The proposal text and accompanying tables and figures, exclusive of curricula vitae or other appended information, should be limited to 12 pages. Please use at least 11-point font. Complete annual and total budgets and a firm timeline for deliverables must be included, as well as a mechanism for technology transfer to appropriate end users. The proposal also provides a record of management responsibility and accountability for various aspects of the project.

Title Page

The following format should be used for the title page (not to exceed 1 page):

Project Title:

Announcement for Proposals and task statement this proposal is responding to:

Principal Investigator(s):

Affiliation:

Address:

Telephone/Facsimile Number(s):

E-mail:

Federal Cooperator (please include full mail and e-mail address as well as phone number:

Duration of Project:

Annual Funding Requested from the Joint Fire Science Program: \$ _____

Total Funding Requested from the Joint Fire Science Program: \$ _____

Total Value of In-Kind and Financial Contributions: \$ _____

Abstract: Summarize the proposed project in a brief abstract not to exceed ½ page. The abstract should include the justification for the proposed project in relation to one or more task statements in the AFP, objectives, appropriate methodology, and applicability of results.

Signature of PI _____

Date:

Signature of Federal Cooperator: _____

Date:

Concurrence of Federal Cooperator fiscal representative: _____

Date:

Introduction

An introductory section should include:

1) Project Justification. A summary of the issue(s), why the project needs to be done (relevance to Task Statement(s) in the AFP), and benefits derived.

2) **Project Objectives.** A statement of the project objective(s) must be clearly stated and measurable. This should include a brief statement of the hypothesis to be tested (if applicable), what information or product(s) will be provided at the end of the project, and how the information or product can be used to resolve the issue(s) stated in the Task Statement(s).

3) **Background.** This section includes a concise review and synthesis of existing knowledge and previous research or other pertinent background information in the project task area, a description of how the proposed project adds to or improves existing knowledge or tools, and a description of coordination with other relevant ongoing or completed products to ensure cross-compatibility and eliminate redundancy.

The introductory section is intended to provide peer reviewers and the Governing Board with evidence that the proposed work compliments previous and on-going work and that the work is applicable to task statements in the AFP. Although the literature may be extensive, the synthesis should generally include reference to no more than about 15-20 of the most important and/or most relevant sources.

Materials and Methods

This section should describe procedures proposed for conducting the project in sufficient detail that a knowledgeable reviewer could understand the process and that a peer could replicate the proposed work. A brief description of the preferred study sites (as applicable) should be included.

Project Duration

Proposals will generally not be funded for longer than three years, although requests for no-cost extensions or additional work may be considered.

Budget

The proposed budget should be provided in sufficient detail to identify direct and indirect costs and related surcharges, to separate labor costs from operational costs, and to identify salaries associated with funded scientists. Contributed costs and the source of those costs should be included in the budget, and annual and total costs should be provided. Separate line items for "capitalized" equipment (more than \$5000) should be included. Outyear projections should be included for multi-year proposals. Proposed budgets should include travel expenses for one PI to participate in an annual 3-day PI workshop. The Governing Board of the Joint Fire Science Program reserves the right to negotiate budget amounts and deliverables with proposing organizations. The JFSP standard indirect rate is 20% for agencies/units/institutions conducting the work, and 10% administrative on funds passed through to collaborators. See section on Indirect Costs below.

Deliverables

Provide specific details on the information or product(s) that would be provided by the proposed work, and realistic delivery dates. It is expected that all final products will include an electronic version suitable for distribution, posting, etc. Descriptions in English units, with metric equivalents in parenthesis, are required. Annual progress summaries are required.

Science Delivery and Application (formerly Technology Transfer)

It is imperative that information or products reach field managers and other end users in a useful form. Therefore, each proposal should include a description of how the "technology" would be transferred to the field. Also, funded projects are required to use Internet websites to post current and relevant information concerning each project except where legally precluded.

Qualifications of Investigators

Include Curriculum Vitae for at least one PI and at least one Federal agency manager or research collaborator. These should reflect recent, relevant experience and publication(s) and should not exceed 2 pages.

D. Review and Evaluation of Proposals

Facsimile or e-mailed proposals will no longer be accepted.

Checklist of items that must be included in Proposal Submissions

- ☐ One original and five copies of complete proposal packet including all material,
- ☐ An electronic version on a diskette or compact disk (in Word or WordPerfect format) must be submitted with the packet.
- ☐ Signatures of principal investigator (PI), (this person will be the technical contact for the JFSP office), the Federal cooperator or land manager (if different than the PI) as appropriate (see definitions of Federal cooperator and land manager), and signature of concurrence of the appropriate Federal Administrative or Contracting Officer.
- ☐ Complete address including phone number, mailing address, surface mail address (if different than mail address) and e-mail address of the principal investigator, Federal cooperator or land manager as appropriate, and Federal Administrative or Contracting Officer who would administer the fiscal aspects of the project.
- ☐ Letters of support are considered in the review process but are not required. However, letters of support that are submitted must be included with the proposal package. Letters must include the title and principal investigator of the project.
- ☐ An introduction or background section that includes the specific objectives of the project and describes how the proposed work is relevant to Task Statement in the AFP.
- ☐ A list of cooperators and their proposed contribution.
- ☐ A Curriculum Vitae or other description of credentials of the PI and co-investigator(s) that are signatories which demonstrates ability to complete the proposed work

- ☐ A brief review and synthesis of related past and current literature and work
- ☐ A first year and total budget, including identification of salaries and indirect costs.
- ☐ Include a “Justification of Need for Salary Support,” approved by appropriate authority, as necessary.
- ☐ A list of deliverables with proposed dates of delivery
- ☐ A science delivery and application mechanism.
- ☐ Letters of support.

Review and evaluation:

Reviews and evaluations of proposals submitted in response to this AFP to the Joint Fire Science Program will focus on the following five factors:

- Relevancy
- Scientific Methods and Study Design
- Products and Delivery into Application
- Collaboration and Leverage
- Administrative Adequacy

Criteria associated with the factors include:

Relevancy:

1. Does the proposal address the Task Statement in the AFP?
2. How relevant is the proposed work to field level personnel?
3. Does the Project Justification adequately describe why the project needs to be done?
4. Is there evidence that land managers need the proposed work?
5. Does this proposal demonstrate new or significant contributions to existing knowledge bases?

Scientific Methods and Study Design:

1. Are study approaches appropriate and adequate to meet stated objectives?
2. What are the qualifications of the team to do the proposed work? Are adequate institutional resources and support available?
3. If the proposal involves software development, does it include beta-testing in the proposal and is there evidence that the proposal addressed agency system architecture and security requirements?

Products and Delivery into Application

1. Does the proposal provide for adequate transfer of information or products and consider general availability and usefulness of proposed technology?

2. Is the proposed work cost effective?
3. At what scale will the proposed work provide information or products? Are the products useful across agency jurisdictions, fuel types, and geographic areas?
4. Does the delivery method facilitate or enhance the utility of the scientific information for management application?
5. Does the delivery use a combination of passive and active science application and delivery methods?

Collaboration - Leverage:

1. How well does the proposed work build on or interface with past or ongoing studies or products on related topics?
2. Does the proposal provide for adequate collaboration among agencies, between fire and land management personnel and research scientists or other collaborators, and between disciplines to ensure broad integration of existing knowledge and approaches as well as applicability of results and recommendations?
3. Is there evidence of local or regional agency support and involvement in the proposal?

Administrative Adequacy:

1. Does the proposal follow the requested format and include all the requested information?
2. If formal cooperative arrangements are proposed (e.g., with universities or other non-federal organizations), is there documentation that these will be feasible and agreeable to the cooperators?
3. Does the proposal address compliance with the National Environmental Policy Act, Threatened/Endangered Species Act, or similar statutes?
4. Are proposed timeframes and budget reasonable and adequately justified, including budgets for proposed sub-agreements?
5. Are the in-kind contributions reasonable/adequate with the proposed budget?
6. Is a justification for salaries included and adequate?

E. Indirect Costs and Salary Policy

Indirect Costs

The JFSP Governing Board recognizes the need of participating organizations to recover reasonable indirect costs. At the same time, the JFSP has limited authority to pay indirect costs, and cost is clearly a factor in the final proposal selection process. The JFSP maximum allowed indirect rates are 20 percent for that portion of the funding that is used by units/institutions conducting the work, and 10 percent administrative cost to the Federal cooperator for “passing through” funding to those cooperating units/institutions.

Salary Policy

Normally, salaries of permanent full-time Federal employees are expected to be provided by their agencies. This is also true of university faculty on 12-month tenure-track appointments. These

employees are already fully funded by their institutions. However, the Governing Board recognizes that there can be mitigating circumstances arising from the need to fill in behind these employees when they are reassigned to Joint Fire Science Program funded activities, or due to policies of individual organizations. In such cases, the Governing Board may agree to fund salaries of permanent employees. A brief justification must be included in the proposal, and the justification must be certified by an appropriate institutional authority, other than the PI or other cooperator on the proposal, at the employee's organization or institution. The format provided below should be used for the certification. In addition, permanent employee salary costs must be explicitly identified in the project budget. The Governing Board requires no special justification (other than a brief description of the need for the position in the budget justification section of the proposal) for funding temporary or term employees, post-doctoral employees, or graduate or undergraduate students.

F. Definitions

Agency Administrator: The agency Administrator is the official responsible for administering policy on an area of public land who has full authority for making decisions and providing direction. Also known as "Agency Line Officer," "Line Officer," and "Land Manager." Examples include Park Superintendent, Forest Supervisor, District Manager, Refuge Manager, District Ranger, and Field Office Manager. Research line officers are not included for the purpose of this AFP.

Announcement for Proposals (or AFP): Joint Fire Science Program method of requesting proposals. Announcements for Proposals include Task Statements for which proposals are sought, instructions for proposal submission, and related information.

Best Management Practices (BMPs): Proactive practical methods or practices used during land management activities, such as fuel treatments, to achieve goals related to water quality, air quality, silviculture, wildlife habitat, biological diversity, aesthetics, recreation, and similar factors.

Federal Administrative or Contracting Officer: The individual attached to the Federal proposer's or Federal cooperator's unit who will be responsible for the administrative and fiscal aspects of the proposed work. This individual is typically an Administrative Officer, Contracting Officer, or Grants and Agreements Specialist.

Federal Cooperator: Representative of a Joint Fire Science Program partner agency.

Indirect Costs: Those costs that are not directly attributable to a specific research project. Examples include the cost of operations and maintenance such as janitorial, phone, and clerical services. The Joint Fire Science Program recognizes two types of indirect costs: "in-house" costs incurred by the agency, institution, or unit completing the research, and "pass-through" costs associated with passing funds to another agency, institution, or unit for the purpose of completing research. Indirect costs are limited to 20 percent of that portion of the proposed budget attributable to the agency, university or unit that is completing the research. Pass-through administrative costs are limited to 10 percent of the funds that are forwarded to the agency, university, or unit that is completing the research. Equipment purchased (\$5000 or more) to support the research project are excluded from indirect costs.

Joint Fire Science Program Governing Board: An appointed, 10-person board, representing the JFSP partners, that manages the JFSP. The Board drafts and posts Announcements for Proposals, selects proposals for funding, supervises the JFSP Manager and program office, and conducts related business.

Joint Fire Science Program PI Workshop: Annual workshop, typically in the Spring, in which PIs of JFSP-funded projects provide progress reports, discuss research-related issues, and conduct other business.

Land Manager: see Agency Administrator

Principal Investigator (or PI): The individual identified in a proposal who is primarily responsible for completing a research project. This person will be the main technical contact for the JFSP Office.

Problem Statement or Statement of Need: A brief statement, written and signed by the agency administrator, which clearly describes the need for the proposed work and how the proposed work would resolve the issue. The statement also includes the agency administrator's commitment to supporting the proposed work. The problem statement is typically one page or less.

Science Delivery and Application (formerly "technology transfer): The transfer of information, materials, models and other research deliverables to end users, along with adequate information to user or apply the deliverables. Examples of active methods include workshops, training sessions, guided field tours, conferences, meetings, and symposia. Examples of passive methods include published papers and websites. A combination of active and passive methods is preferred.

Task Statement: A specific area of interest, identified in an Announcement for Proposals, for which proposals are sought.

Certification to the Joint Fire Science Program
Justification of Need for Salary Support

I hereby certify the attached Justification of Need to provide temporary salaries for full-time permanent employee (s)_____ (*list name of employee(s)*) is necessary and appropriate to enable him/her (them) to fully and directly participate in the proposed project.

Justification:

I understand that salary funding for this/these employee(s) directly involved in the proposed project is temporary and will not be provided beyond the duration of the proposed project.

Signature_____

Date_____

Name (type or print)_____

Title _____

Phone Number _____